

### **REMARKS**

Favorable reconsideration of this application in light of the preceding remarks and the following discussion is respectfully requested.

No claims having been cancelled or added, the Applicants respectfully submit that claims 1-20 remain properly under consideration in this application. The present response includes Amendments to paragraph [0026] of the Specification to correct a typographical error. Claim 4 has been amended to clarify that the referenced movement is that of the carrier as it moves to the first and second positions. The Amendments to the Claims reflected above show the amended claims in marked-up form in accordance with 37 C.F.R. § 1.121.

The Applicants respectfully note that the present Action does not indicate whether or not the drawing filed on September 4, 2003, have been accepted as filed. An indication of the status of this drawing is respectfully requested.

#### Objections to the Specification

The Specification stands objected to for a typographical error in paragraph [0026]. The Applicants respectfully submit that the amendment to this paragraph as indicated above is sufficient to overcome this objection and request that it be withdrawn.

#### Rejections Under 35 U.S.C. § 102(b)

Claims 1-3, 10 and 12 stand rejected under 35 U.S.C. § 102(b) as anticipated by Hatley's U.S. Patent No. 5,982,839 ("Hatley"). The Applicants respectfully traverse this rejection for the reasons detailed below.

The Applicants respectfully contend that anticipation requires that “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference,” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987), in “as complete detail as is contained in the ... claim,” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989), with the structural elements “arranged as required by the claim,” *In re Bond*, 910 F.2d 831 (Fed. Cir. 1990).

The Applicants respectfully contend that, as cited in the present Action, the structure defined by Hatley does not teach or suggest each and every element arranged as required by the rejected claims. The Applicants note, for example, that contrary to the characterization of “holding mechanism (54),” this element is defined differently in terms of both structure and function by Hatley, which provides:

Scanning arm 32 includes a head driving assembly 52 adjacent end 36 and coupled to scanning head 34. Head driving assembly 52 is coupled to a *gear 54* and is configured to move scanning head 34 relative to scanning arm 32. Particularly, head driving assembly 52 is configured to rotate scanning head 34 about a pivot point 56 with respect to an x-axis, e.g., the horizontal axis, a y-axis, e.g., the vertical axis, and a z-axis extending through pivot point 56. (emphasis added)

Col. 3, lines 33-40. The Applicants respectfully submit that there is no teaching or suggestion in Hatley that gear 54 acts as “a holding mechanism arranged on the frame for temporarily fixing the position of the frame adjacent the generally cylindrical object” as required by claim 1 and those claims that depend therefrom. The Applicants respectfully submit that Hatley provides that clamp 28 is used to fix the disclosed apparatus to the pipe under inspection and provides no means arranged on the arcuate frame for “temporarily fixing the position of the frame adjacent the generally cylindrical object.” Absent such an element in such a configuration, Hatley

cannot fairly be said to anticipate the rejected claims. The Applicants also respectfully submit that there no teaching or suggestion has been identified in Hatley that the disclosed apparatus is suitable for examining “an obstructed circumferential portion” as required by claim 1.

With respect to claim 2, the Applicants respectfully submit that the vague allusion to FIG. 3, Action at 3, is insufficient to demonstrate that Hatley teaches or suggests any “holding mechanism for temporarily fixing the position of the frame adjacent a generally cylindrical object” let alone any of the specific configurations presented in the following Markush group. Indeed, the only potential point of contact between the pipe and Hatley’s apparatus as illustrated in FIG. 3 appears to be the transducer elements 80 themselves.

With respect to claims 3 and 10, the Applicants respectfully submit that the gear 88, that is identified by the Examiner as “sensor actuator (88),” Action at 3, is described by Hatley

A rear portion 84 of substantially "C" shaped element 70 includes a notch 86. A gear 88 is positioned in notch 86 and coupled to scanning head 34. Gear 88 also is coupled to gear 54 (FIG. 2) to facilitate rotating scanning head 34 about an axis 90, i.e. the z-axis (FIG. 2)

col. 4, lines 34-39, does not describe a

sensor actuator arranged and configured for fine movement of the sensor head relative to the carrier, the range of movement being sufficient to compensate for variations in positioning the carrier relative to the surface of the cylindrical object and thereby achieve a desired orientation of the sensor head and the surface

With respect to claim 12, the Applicants respectfully submit that the vague allusions to FIGS. 2 and 3 provided in present Action do not identify with sufficient specificity any portion of Hatley that shows or teaches a method for inspecting an “*obstructed* circumferential portion of a generally cylindrical object” including the steps of “positioning the sensor adjacent an obstructed portion of the generally cylindrical object ... [and] moving the sensor along a circumferential portion of the obstructed portion of the generally cylindrical object to define a scanned surface portion.” The Applicants also respectfully express some confusion regarding the identification of the “carrier (part that holds sensor 5)” as being “on the frame” since no such reference numerals are used in Hatley. The Applicants would, therefore, appreciate clarification as to the particular structures being referenced.

The Applicants, therefore, respectfully request that these rejections be withdrawn.

Rejections Under 35 U.S.C. § 103(a)

Claims 1-19 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Hatley. The Applicants respectfully traverse this rejection and incorporate the discussion above regarding the apparent mischaracterization of the identified elements of Hatley.

With regard to claim 13, the Applicants respectfully contend that the assembly of Hatley, as detailed, does not teach or suggest a “holding mechanism” *provided on the frame*. Indeed, as described by Hatley the apparatus includes

a remotely operated vehicle (ROV) coupled to a mounting subassembly and a scanning subassembly controllable by a computerized motion control system. In one embodiment, the mounting subassembly includes a clamp configured to be

mounted to selected pipes within the RPV, and the scanning subassembly is movably coupled to the mounting subassembly.

\* \* \*

Inspection assembly 10 includes a mounting subassembly 16 and a scanning subassembly 18. Mounting subassembly 16 includes a support element 20, or x-axis tube, and a coupling element 26. X-axis tube 20 is coupled to a clamp 28, which is removably coupled to a segment 30 of pipe 12.

Col. 2, lines 4-9, 61-66. Thus Hatley arranges the mounting subassembly 16 and the scanning subassembly 18 (which the Examiner has identified, apparently in total, as the claimed “support,” Action at 2) at opposite ends of scanning arm 32. The present invention, on the other hand, incorporates the holding (mounting) mechanism for fixing the position of the frame, not on some remote mounting assembly, but on the frame itself.

The Applicants respectfully contend that no teaching or suggestion has been identified within Hatley that would lead one of ordinary skill in the art to make the configuration changes suggested in the present Action in order to obtain the claimed apparatus for practicing the claimed inspection method. Thus, while the Applicants do not necessarily dispute the Examiner’s speculation regarding the manner in which the Hatley apparatus could be operated, they respectfully contend that such speculation does not address or overcome the material differences in the construction of the Hatley apparatus and the claimed device that would cause them to function in a materially different manner, particularly with regard to the inspection of obstructed surfaces.

The Applicants respectfully contend that the mere fact that reference(s) *could* be combined or modified in the manner suggested is an insufficient basis on which to maintain a rejection under 35 U.S.C. § 103(a) unless the prior art also teaches or suggests the desirability of the combination or modification. *In re Mills*, 916 F.2d

680 (Fed. Cir. 1990). Similarly, even if a device or apparatus disclosed in the prior art “may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.” *Id.* at 682; *In re Fritch*, 972 F.2d 1260 (Fed Cir. 1992). The Applicants respectfully contend that the present Action relies on speculation and apparently inadvertent mischaracterizations of the Hatley structure to achieve the material “modifications” necessary to read the claims onto the Hatley apparatus. The Applicants respectfully contend, therefore, that without such unsupported speculation and in light of an accurate characterization of the Hatley apparatus, Hatley cannot fairly be said to anticipate or obviate the present invention.

The Applicants, therefore, respectfully request that these rejections be withdrawn.

#### Allowable Subject Matter

The Applicants note with appreciation the Examiner’s indication that claims 4-9 and 11 would be allowable if rewritten to remove their dependence from a

**CONCLUSION**


In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections have been addressed and overcome, leaving the present application in condition for allowance. A Notice to that effect is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Very truly yours,

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